

ORIGINAL

ARIZONA DEPARTMENT OF PUBLIC SAFETY

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JANE DEE HULL
GOVERNOR

JOE ALBO
DIRECTOR

EX PARTE OR LATE FILED

November 17, 1999

Ms. Magalie Salas
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Ms. Salas:

Herewith, pursuant to Section 1.1206 of the Commission's rules, is an *ex parte* document filed by the Arizona Department of Public Safety in the proceeding captioned: Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Notice of Proposed Rulemaking*.

This correspondence is an original paper copy of an electronic filing.

Sincerely,



Curt Knight, Manager
Telecommunication Services Section

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Attachments

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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

In the Matter of

Notice of Proposed Rulemaking
Service Rules for 746-764 and 776-794
MHz Bands, and Revision of Part 27 of the
Commission's Rules

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WT Docket 99-168

To the Commission:

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**COMMENTS BY THE STATE OF ARIZONA
TO THE NOTICE OF PROPOSED RULEMAKING**

Submitted By:

STATE of ARIZONA
Department of Public Safety
P.O. Box 6638
Phoenix, AZ 85005-6638

Dated: November 17, 1999

ARIZONA DEPARTMENT OF PUBLIC SAFETY

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November 17, 1999

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The Honorable William E. Kennard, Chairman
Federal Communications Commission
Washington, DC 20554

NOV 22 1999

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RE: Notice of Proposed Rulemaking
Service Rules for 746-764 and 776-794
MHz Bands, and Revision of Part 27 of the
Commission's Rules
WT Docket No. 99-168

Dear Chairman Kennard:

The Arizona Department of Public Safety (ADPS) is filing *ex parte* comments of WT Docket No. 99-168, Notice of Proposed Rule Making, relating to the development of rules for the use of the 700 MHz Band under Part 27.

INTRODUCTION

ADPS, speaking for the State of Arizona, maintains the lead role in Arizona State radio communications, pursuant to Arizona Revised Statute 41-1749A. This Department directly and indirectly provides services to fourteen State Governmental agencies through: Engineering, procurement bids, licensing, installation, and maintenance of radio systems. ADPS supports more than 10,000 subscriber units in multiple RF bands. The ADPS assists these agencies in licensing their systems as needed, and maintains over 500 FCC licenses for the user agencies under Parts 90 and 101. The ADPS has had this lead role in Arizona State Radio communications since its inception in 1969.

Since Phoenix, our state capitol, is one of the 10 largest cities in the U.S., the Public Safety eligibles are concerned about availability and usability of radio spectrum. Almost all current spectrum has been allocated in the Phoenix area. ADPS supports the National Coordination Committee (NCC) concern about the loss of useable spectrum due to interference in the adjacent allocated band, i.e., the band for which this Docket is concerned. The State of Arizona is studying the use of the newly assigned 700 MHz Band for a state-wide voice and mobile data computer system.

ADJACENT CHANNEL TECHNOLOGIES

As noted by the NCC, users on adjacent frequencies whose technologies and frequency/site coordination are dissimilar are prone to technical conflicts. Indeed, several agencies in Arizona have or are experiencing interference from certain commercial providers. Having private land mobile radio users adjacent to the Public Safety assignments would help minimize interference. Similar services, coordinators, and licensing rules would help provide protection to Public Safety users at the spectrum block boundaries.

An additional concern deals with the newer digital technologies where adjacent channel coupled power is considerably higher than with analog formats. Of particular concern would be high power digital formats, like DTV transmissions. The ability to operate land mobile channels adjacent to fractional megawatt broadcast DTV television channels is probably unrealistic. Broadcast (TV/DTV) assignments will make portions of the new spectrum unusable due to interference in the very markets where the spectrum may be most needed.

OUT-OF-BAND AND SPURIOUS EMISSION LIMITS

While the historic requirement for spurious suppression (dB) has been $43 + 10\log(P)$ watts, and this "has been found adequate to prevent adjacent channel interference", this standard translates to 0.05mw (-13DBm) of transmitted spurious signal levels (more than this above 5,000 watts of transmitter power). This level is more than enough to cause interference for several miles around the transmitter. Fortunately, current analog equipment exceeds this legal requirement. Since this rule was made when there were vacuum tube radios and fewer users and fewer channels, we should consider making this requirement more in keeping with current technology, and not limited to just this band or service.

Sincerely,



Curt Knight, Manager
Telecommunication Services Section
Arizona Department of Public Safety

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